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United States Department of the Interior

FISH AND WILDLIFE SERVICE

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Frequently Asked Questions Proposed Critical Habitat for Five Endangered Mussels and Two Threatened Mussels in Four Northeast Gulf of Mexico Drainages

Q: What are these seven mussels?

A: The seven mussels of this proposed rule are the endangered fat threeridge, shinyrayed pocketbook, Gulf moccasinshell, Ochlockonee moccasinshell, and oval pigtoe, and the threatened Chipola slabshell, and purple bankclimber. They are all bivalve mollusks (clams) that live embedded in the bottom of flowing rivers and streams, except during their larval life stage (called a glochidia), when they attach briefly as parasites on the gills or fins of fish. The adults are filter feeders that siphon water into their shells and across four gills that are specialized for respiration and food collection. The juveniles typically burrow completely into the stream bed and eat food particles embedded in the substrate. The adult and juvenile life stages are relatively immobile, but they do disperse in a stream by hitching a ride on fish during their larval stage.

Q: Where do they live?

A: The range of the seven mussels includes portions of four river basins of the northeast Gulf of Mexico in Alabama, Florida, and Georgia: Econfinia Creek, Apalachicola-Chattahoochee-Flint (ACF), Ochlockonee, and Suwannee. Of these four basins, the ACF is the largest and the only one that extends beyond the Coastal Plain into the Piedmont plateau of Georgia and Alabama. Two or more of the seven mussels occur in each of the four basins, except the Suwannee, in which only the oval pigtoe is currently found. Because reservoirs are unsuitable habitat for these mussels and the dams which impound them are barriers to the movement of their host fishes, their range within two of the basins (ACF and Ochlockonee) is divided into two or more sub-basins that likely represent separate interbreeding populations. The Fish and Wildlife Service estimates that the five species listed as endangered are each extirpated from over half of their historical range, and the two threatened species are extirpated from about one-third of their range.

Q: Why are they endangered or threatened?

A: The range and abundance of these seven mussels has seriously declined due to changes in their river and stream habitats resulting from dams, dredging, mining, channelization, pollution, sedimentation, and water withdrawals. The 300 species of

freshwater mussels in North America, including these seven species, are probably the most imperiled group of animals on the continent. About 12 percent of them have gone extinct in the last 100 years, including three species from the region where these seven mussels live, and another 70 species are listed as endangered or threatened under the Endangered Species Act (ESA). The Service listed these seven mussels under the ESA in 1998.

Q: What is critical habitat?

A: Critical habitat is a term in the ESA. It refers to specific geographic areas with features that are essential for the conservation of a threatened or endangered species and that may require special management considerations or protection. Federal agencies are charged with ensuring that their actions do not result in the destruction or adverse modification of designated critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. It does not grant government or public access to private lands.

Q: Why didn't the Service designate critical habitat when it listed these mussels in 1998?

A: When the Service listed the seven mussels, it was determined that designating critical habitat for them was not prudent. The Service believed it would not benefit the mussels and could potentially harm them. The Endangered Species Act prohibits unauthorized take of listed species and requires consultation for Federal activities that may affect them, including habitat alterations, regardless whether critical habitat has been designated. In 30 years of implementing the ESA, the Service has found that designating critical habitat provides little additional protection to most listed species, while consuming significant amounts of scarce conservation resources.

Q: Why is the Service proposing critical habitat now?

A: On March 15, 2004, the Center for Biological Diversity (Center) filed a lawsuit in the U.S. District Court for the Northern District of Georgia (Civil Action No. 1:04 CV-0729-GET) alleging that the Service violated the ESA by failing to designate critical habitat for the seven mussels. The Service entered a settlement agreement with the Center on August 31, 2004, which stipulates that the Service shall submit for publication in the *Federal Register* on or before May 30, 2006, a new prudent determination, and if prudent, a proposed rule designating critical habitat. This publication is our new prudent determination and our proposed rule designating critical habitat for the seven mussels. This rule is constructed in light of several court rulings on critical habitat issued since our 1998 final listing rule for the seven mussels.

The Service finds that, although the low numbers of these mussels make it unlikely that their populations could withstand even moderate collecting pressure or vandalism, there is no specific evidence that taking, collection, vandalism,

trade, or unauthorized human disturbance will significantly occur. Accordingly, the Service withdraws the previous determination that the designation of critical habitat will not benefit the seven mussels and will increase the degree of threat to the species. The Service determines that the designation of critical habitat is prudent for these species. At this time, the Service has sufficient information necessary to identify specific areas that meet the definition of critical habitat and are, therefore, proposing critical habitat for the seven mussels.

Q: What is destruction or adverse modification of critical habitat?

A: “Destruction or adverse modification of designated critical habitat” is defined in the Service’s regulations as a “direct or indirect alteration that appreciably diminishes the value of the critical habitat for both the survival and recovery of a listed species” (50 CFR 402.02). Such alterations include, but are not limited to, adverse changes to the physical or biological features that were the basis for determining the habitat to be critical. Two federal courts in two separate critical habitat cases have ruled that this definition is invalid. In response to these rulings, the Service is currently reviewing the definition, but has not yet proposed any revision to the regulations. Until new regulations are adopted, the Service must rely upon the ESA statute itself and the court decisions.

Q: How is the Service determining which areas to designate as critical habitat?

A: The Service has identified the physical and biological habitat features that each life stage (adult, juvenile, glochidia) must have for normal behavior, growth, and survival, and that each species needs for normal reproductive success and dispersal rates. These habitat features are referred to as *primary constituent elements* (PCEs). The PCEs for the seven mussels are:

1. A geomorphically stable stream channel (a channel that maintains its lateral dimensions, longitudinal profile, and spatial pattern over time without an aggrading or degrading bed elevation);
2. A predominantly sand, gravel, and/or cobble stream substrate;
3. Flowing water;
4. Water quality (including, temperature, turbidity, dissolved oxygen, chemical constituents) that meets or exceeds the current aquatic life criteria established under the Clean Water Act; and,
5. Fish hosts (such as largemouth bass, sailfin shiner, brown darter, etc.) that support the larval life stages of the seven mussels.

These mussels have become relatively rare, but where they occur, we find at least one or more of these PCE’s. We have drawn the boundaries of the proposed critical habitat “units” to include all of the locations, because they are so rare, at which they presently occur. A unit is an occupied stream or a group of occupied streams in which host fish may move unimpeded by dams or other passage barriers. The lateral boundaries of a unit are the ordinary high water marks on the banks of the stream channel. The Service has drawn the upstream and downstream boundaries of these units at the probable limits of the mussels’ range in the streams included in the unit or at barriers to fish passage, such

as a dam. Streams for which the Service has no recent evidence of one or more of the seven mussels occurrence are not included in the proposed critical habitat units.

Q: Are all areas within the proposed critical habitat boundaries considered critical habitat?

A: When delineating proposed critical habitat boundaries, the Service makes every effort to avoid proposing the designation of developed areas and other areas that lack the PCEs or are otherwise not essential for the conservation of the species. The proposed critical habitat for the seven mussels consists entirely of perennial stream channels between the ordinary high water marks. Development within the unit boundaries is almost entirely limited to bridges. Bridges do not necessarily make the habitat unsuitable for the seven mussels, which are sometimes found under or near bridges. However, any areas that lack the PCEs that have been inadvertently left inside the proposed critical habitat boundaries are not considered part of the proposed unit.

Q: Can areas be excluded from a critical habitat designation?

A: Yes. The ESA allows for exclusions, provided that the benefits of the exclusion outweigh the benefits of inclusion, and that the exclusion will not result in the extinction of the species. Exclusions are possible for public and private lands that have secure, long-term conservation plans in place that benefit the mussels, and for economic reasons. The Service is not proposing any exclusions at this time, however, an economic analysis of the proposed designation is being prepared that will quantify any potential economic impacts of designation. This analysis will be used in preparing a final rule designating critical habitat.

Q: Will the critical habitat designation delay Federal decisions on permits or funding?

A: Under the ESA, the Service has specific time frames in which to complete the consultation process with federal agencies. These time frames remain the same with or without designated critical habitat. The Service is not proposing to designate any areas that are not presently occupied by one or more of the seven mussels. The Service already reviews the direct and indirect effects of federal actions on the seven mussels will continue to do so for critical habitat if it is designated. Critical habitat designation does not create a separate process, and timelines do not change.

Q: Who can I contact for more information regarding this proposed critical habitat?

A: Jerry Ziewitz by telephone at 850/769-0552 x 223, via email at Jerry_Ziewitz@fws.gov, or by mail at U.S. Fish and Wildlife Service, Panama City Field Office, 1601 Balboa Avenue, Panama City, Florida 32405.